

AMENDMENTS TO THE CLAIMS:

1. (Previously presented) The semiconductor device according to claim 30, wherein said specified region comprises a circuit formation portion.
- 2-4. (Canceled)
5. (Currently amended) The semiconductor device according to claim ~~36~~ 30:
wherein one or more slit-like notches are formed at specified positions in said seal rings in such a manner that the respective slit-like notches in any two of said seal rings that are adjacent to each other are not aligned.
6. (Previously presented) The semiconductor device according to claim ~~36~~ 30, wherein, said at least one seal ring comprises a damascene wiring structure.
7. (Original) The semiconductor device according to claim 6, wherein said damascene wiring structure comprises a single damascene wiring structure.
8. (Original) The semiconductor device according to claim 6, wherein said damascene wiring structure comprises a dual damascene wiring structure.
9. (Original) The semiconductor device according to claim 6, wherein said damascene

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wiring structure comprises a combination of a single damascene wiring structure and a dual damascene wiring structure.

10. (Canceled)

11. (Currently amended) The semiconductor device according to claim-~~36~~ 30, wherein:
said-at least one of said seal ring-rings is connected via a contact to a diffusion region formed in said semiconductor substrate, and
said contact and said diffusion region are formed so as to match approximately said at least one of said seal ring-rings in shape.

12. (Currently amended) The semiconductor device according to claim-~~36~~ 30, wherein:
said-at least one of said seal ring-rings is connected via a contact to a diffusion region formed in said semiconductor substrate, and
said contact and said diffusion region are formed without matching said at least one of said seal ring-rings in shape.

13. (Currently amended) The semiconductor device according to claim-~~36~~ 30, wherein each of said at least one conductive layer-layers comprises copper or a copper-based conductive material.

14-29. (Canceled)

30. (Currently amended) A semiconductor device comprising:

a semiconductor chip provided with a circuit formation portion comprising a plurality of wiring insulating films stacked on top of each other in layers on a semiconductor substrate, and a multi-layer interconnection formed in said plurality of wiring insulating films,

wherein ~~one or more~~ at least two wiring trenches are formed ~~in each of upwardly or downwardly through~~ said plurality of wiring insulating films along a periphery of said semiconductor chip in such a manner as to surround a specified region on said semiconductor substrate, said at least two wiring trenches including an outer wiring trench surrounding an inner wiring trench,

wherein in each of said ~~one or more~~ wiring trenches, a seal ring is formed by a conductive layer ~~is buried via a first conductive layer diffusion preventing film, in such a manner that the respective wiring trenches corresponding to each other in said plurality of wiring insulating films are connected with each other upwardly or downwardly,~~ each seal ring being connected to a diffusion region formed in said semiconductor substrate,

wherein ~~each~~ at least one of said wiring ~~insulation film~~ insulating films comprises a low dielectric constant film comprising methyl-silsesquioxane or hydrogen-silsesquioxane, and-a

wherein at least one second conductive layer diffusion preventing film is formed between a lower one and an upper one of said wiring insulating films, each second conductive layer diffusion preventing film being connected with a corresponding one of said first conductive layer diffusion preventing ~~films.~~ films; and

~~wherein at least one of said wiring insulation films comprises a low dielectric constant film comprising methyl-silsesquioxane or hydrogen-silsesquioxane.~~

31-34. (Canceled)

35. (Currently amended) The semiconductor device according to claim ~~2~~ 30, wherein said diffusion region comprises an N-type diffusion region.

36. (Canceled)

37. (Currently amended) A a-semiconductor device, comprising:

a semiconductor chip provided with a circuit formation portion comprising a plurality of wiring insulating films stacked on top of each other in layers on a semiconductor substrate, and a multi-layer interconnection formed in said plurality of wiring insulating films,

wherein ~~one or more~~ at least two wiring trenches are formed ~~in each of~~ upwardly or downwardly through said plurality of wiring insulating films along a periphery of said semiconductor chip in such a manner as to surround a specified region on said semiconductor substrate, said at least two wiring trenches including an outer wiring trench surrounding an inner wiring trench.

wherein in each wiring trench, a seal ring is formed by a conductive layer is-buried via a first conductive layer diffusion preventing film, ~~in such a manner that the respective wiring trenches corresponding to each other in said plurality of wiring insulating films are connected~~

~~with each other upwardly or downwardly, each seal ring being connected to a diffusion region~~
formed in said semiconductor substrate,

wherein ~~each~~ at least one of said wiring insulating ~~film-films~~ comprises a low
dielectric constant film having a dielectric constant lower than or equal to that of methyl-
silsesquioxane, and a

wherein at least one second conductive layer diffusion preventing film is formed
between a lower one and an upper one of said wiring insulating films, each second conductive
layer diffusion preventing film being connected with a corresponding one of said first
conductive layer diffusion preventing films-films, and

~~wherein at least one wiring insulating film comprises a low dielectric constant film~~
~~having a dielectric constant lower than or equal to that of methyl-silsesquioxane.~~

38. (Currently amended) A ~~a~~-semiconductor device, comprising:

a semiconductor chip provided with a circuit formation portion comprising a plurality
of wiring insulating films stacked on top of each other in layers on a semiconductor substrate,
and a multi-layer interconnection formed in said plurality of wiring insulating films,

wherein ~~one or more~~ at least two wiring trenches are formed ~~in each of~~ upwardly or
downwardly through said plurality of wiring insulating films along a periphery of said
semiconductor chip in such a manner as to surround a specified region on said semiconductor
substrate, said at least two wiring trenches including an outer wiring trench surrounding an
inner wiring trench,

wherein in each of said wiring-trench trenches, a seal ring is formed by a conductive

layer is buried via a first conductive layer diffusion preventing film, ~~in such a manner that the~~
~~respective wiring trenches corresponding to each other in said plurality of wiring insulating~~
~~films are connected with each other upwardly or downwardly, each seal ring being connected~~
to a diffusion region formed in said semiconductor substrate,

wherein ~~each~~ at least one of said wiring insulating ~~film~~ films comprises a low
dielectric constant film having a dielectric constant lower than or equal to that of hydrogen-
silsesquioxane, and a

wherein at least one second conductive layer diffusion preventing film is formed
between a lower one and an upper one of said wiring insulating films and is connected with a
corresponding ~~one~~ ones of said first conductive layer diffusion preventing films. ~~films,~~ and

~~wherein at least one wiring insulating film comprises a low dielectric constant film~~
~~having a dielectric constant lower than or equal to that of hydrogen-silsesquioxane.~~